

### Anti-CD363 Antibody

Rabbit polyclonal antibody to CD363 Catalog # AP61405

### Specification

# Anti-CD363 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, IF/IC, IHC <u>P21453</u> <u>008530</u> Human, Mouse, Rat Rabbit Polyclonal 42811

### Anti-CD363 Antibody - Additional Information

Gene ID 1901

**Other Names** CHEDG1; EDG1; Sphingosine 1-phosphate receptor 1; S1P receptor 1; S1P1; Endothelial differentiation G-protein coupled receptor 1; Sphingosine 1-phosphate receptor Edg-1; S1P receptor Edg-1; CD363

Target/Specificity Recognizes endogenous levels of CD363 protein.

Dilution WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~1:100~500

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

# Anti-CD363 Antibody - Protein Information

Name S1PR1

Synonyms CHEDG1, EDG1

#### Function

G-protein coupled receptor for the bioactive lysosphingolipid sphingosine 1-phosphate (S1P) that seems to be coupled to the G(i) subclass of heteromeric G proteins. Signaling leads to the activation of RAC1, SRC, PTK2/FAK1 and MAP kinases. Plays an important role in cell migration,



probably via its role in the reorganization of the actin cytoskeleton and the formation of lamellipodia in response to stimuli that increase the activity of the sphingosine kinase SPHK1. Required for normal chemotaxis toward sphingosine 1-phosphate. Required for normal embryonic heart development and normal cardiac morphogenesis. Plays an important role in the regulation of sprouting angiogenesis and vascular maturation. Inhibits sprouting angiogenesis to prevent excessive sprouting during blood vessel development. Required for normal egress of mature T-cells from the thymus into the blood stream and into peripheral lymphoid organs. Plays a role in the migration of osteoclast precursor cells, the regulation of bone mineralization and bone homeostasis (By similarity). Plays a role in responses to oxidized

1-palmitoyl-2-arachidonoyl-sn-glycero-3- phosphocholine by pulmonary endothelial cells and in the protection against ventilator-induced lung injury.

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Endosome. Membrane raft. Note=Recruited to caveolin-enriched plasma membrane microdomains in response to oxidized 1-palmitoyl-2-arachidonoyl-sn-glycero-3-phosphocholine. Ligand binding leads to receptor internalization

#### **Tissue Location**

Endothelial cells, and to a lesser extent, in vascular smooth muscle cells, fibroblasts, melanocytes, and cells of epithelioid origin

# Anti-CD363 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Anti-CD363 Antibody - Images



Western blot analysis of CD363 expression in A375 (A), DLD (B), rat skin (C), mouse muscle (D) whole cell lysates.





Immunohistochemical analysis of CD363 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CD363 staining in COS7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a Alexa Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

# Anti-CD363 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human CD363. The exact sequence is proprietary.